Recreation Management Direction

The following sections provide detailed management direction for the overall recreation goals and objectives specified in **Appendix C, Table C-1.**

Recreation Opportunity Spectrum

The goals and objectives for recreation settings and experiences are defined in terms of Recreation Opportunity Spectrum (ROS). The ROS system provides a framework for defining opportunities the public might desire and identifies the availability of those experiences. The Wilderness Recreation Opportunity Spectrum (WROS) was developed as a part of the ROS system to describe a diverse range of recreational classes in Wilderness: pristine, primitive, and semi-primitive. Refer to Recreation Settings, Experiences and Opportunities in **Chapter 3** for information that is more detailed.

The ROS was used to develop objectives, standards and guidelines for proposed recreation use and development (*Forest Service Manual, Chapter 2310.3*). **Table C-2a** describes the ROS settings for the Hells Canyon Wilderness and nonwilderness portions of the HCNRA. The descriptions of the primitive and semi-primitive classes for WROS differ slightly from the ROS descriptions and, to avoid confusion with ROS settings, are not abbreviated as acronyms.

ROS classifications may change due to increased management; visitor perceptions; extent and proximity of roads; management activities such as forested vegetation treatment or fire suppression; and changes in facilities access.

Table C-2a: Recreation Opportunity Spectrum (ROS) Settings – Wilderness and Nonwilderness

WROS Setting	**Wilderness**
Pristine	Visitation is very limited. Maintaining a natural and unmodified environment is emphasized. Visitors seldom and only temporarily displace wildlife throughout the year. This is the best opportunity for isolation and solitude, requiring a maximum degree of primitive skills, challenge, and risk. Access is difficult, requiring travel without trails or the use of routes created by animals or previous human visitation.
Primitive	Visitation is limited. The environment is essentially unmodified and natural with no long-term changes to the landscape except for facilities or structures that are deemed historically important to the area or experience. Signs of human use are minimal. Visitation does not displace wildlife during critical periods. High opportunity exists for exploring and experiencing considerable isolation and solitude. Primitive recreation skills are required with a high degree of challenge and risk. Access is via trails maintained to a "most difficult" standard.
Semi-primitive	Visitation is low to moderate. The environment is essentially unmodified and natural, with no long-term changes to the landscape, except for facilities or structures that are historically important to the area or experience. Visitation does not displace wildlife during critical periods. Moderate opportunity exists for exploring and experiencing isolation, independence, and closeness to nature. No-trace camping and primitive skills are required, with a moderate to high degree of challenge and risk. Access is via constructed and maintained trails managed to "more difficult" or "most difficult" standards.
ROS Setting	**Nonwilderness**
SPNM (semi-primitive nonmotorized)	Provide visitors with a high probability of getting away from sights and sounds of other people, to be independent, enjoy nature, and practice outdoor skills.
SPM (semi-primitive motorized)	Provide visitors with a moderate probability of getting away from sights and sounds of other people, to be independent, enjoy nature, and practice outdoor skills. There is also the opportunity to use motorized equipment while in the area.
RN (roaded natural)	Provide visitors with an opportunity to meet and enjoy other visitors, balanced with being somewhat isolated from the sights and sounds of other people. Visitors have the opportunity to interact with the natural environment, but the risk and challenge associated with the SPM is not present. Both motorized and nonmotorized forms of recreation take place. All overnight and day-use facilities occur in this setting.
R (rural)	Provide visitors with a high probability of meeting and enjoying others. Convenience in access to and use of sites is important. Challenge, risk, and testing of skills are relatively unimportant, except for some specific activities such as downhill skiing.

Research on visitor preferences plus professional judgment were used to develop seven setting indicators that represent aspects of recreation settings that can be influenced by management (FSM, Chapter 2310.3). **Table 3-3** describes the seven indicators for both Wilderness and nonwilderness settings.

Table C-2b: Wilderness and Nonwilderness Setting Indicators

Indicator	Description
Access	Access includes type and mode of travel. Highly developed access generally reduces opportunities for solitude, risk, and challenge. It tends to increase opportunities for socializing and feelings of comfort and safety. Access for challenged individuals would correspond with ROS classifications. Access to rural settings is easiest and to primitive settings the most challenging.
Remoteness	Remoteness is the extent to which individuals perceive themselves removed from the sights and sounds of human activity. In some cases, a lack of remoteness is important in some setting experiences. Generally, remote areas are perceived to be more primitive.
Naturalness/Visual Quality	This indicator refers to the scenic condition, landscape character, sense of place, and scenic-integrity levels that determine the sustainability of scenic quality and affect the positive psychological outcomes associated with enjoying nature.
Social Encounters	This factor refers to the number and type of other recreationists met along travel ways, or camped within sight or sound. This measures the ability of the area to provide experiences such as solitude or opportunity for social interaction. Increasing the number of visitors to an area changes the kind of recreation experience offered, attracting new users and causing others to leave or stop coming.
Visitor Management	This includes the degree to which visitors are regulated and controlled as well as the level of information and services provided for visitor enjoyment. Generally, on-site information is more appropriate at the developed end of the spectrum, while off-site sources and a sense of self-discovery are preferable at the primitive end.
Visitor Impacts	This factor refers to the impact of visitor use on the environment. The relevant question for managers is not "how can impacts be prevented," but rather, "how much change will be allowed and which actions are appropriate for control?" Controlling impacts according to the designated ROS is emphasized because impacts have an effect on visitor experiences. Maintaining air, water, and noise quality standards in the face of visitor impacts is important in all classifications.
Facilities	This indicator refers to the level of site development. A lack of facilities or site modification can enhance feelings of self-reliance and independence and can provide experiences with a high degree of naturalness. Highly developed facilities can add to the feelings of comfort and convenience and increase opportunities for socializing.

Setting Indicators for Hells Canyon Wilderness

Table C-2c defines standards for each of the setting indicators (access, remoteness, naturalness/visual quality, social encounters, visitor management, visitor impacts, and facilities) to meet social and biophysical objectives in the Hells Canyon Wilderness. The setting indicators were developed for the HCNRA based on regional indicators. They were then further refined based on indicators for the adjacent Eagle Cap Wilderness and modified to meet conditions for the HCNRA. These standards would be new for **Alternatives B** and **E-modified.**

Table C-2c: Setting Indicators - Hells Canyon Wilderness

Indicators	Pristine	Primitive	Semi-primitive
Access	Cross-country. No system trails.	Cross-country by system trails. No motorized trails.	
Remoteness	Out of sight and sound of human activity. More than 1½ hour walk to area.	Out of sight and sound of human activity 80% of time. 1 ½-hour walk to area.	Distant sight and/or sound of human activity. More than ½-hour walk from any motorized travel.
Naturalness/ Visual Quality	Very high scenic integrity.		
Social Encounters	80% probability of not more than one encounter per day. No other camps within 500 ft. of any site.	80% probability of not more than 7 encounters per day. 80% probability that 0-1 camps are visible.	80% probability for not more than 10 encounters per day. Highest use areas on trailheads may be up to 12 encounters per day. 80% probability that 2 or fewer camps are visible.
Visitor Management	Party size is currently limited to 8 people and 16 head of stock. Adjustments may be made to most standards for water, soil, fish, and social capacity if monitoring indicates a need for change.		
	Visitor control is evident outside Wilderness at trailhead and boundary portals. Wilderness ranger or other personnel presence as necessary.	Visitor controls are evident outside Wilderness at trailheads and boundary portals. Wilderness ranger or other personnel presence, periodic.	Visitor controls are evident outside Wilderness at trailheads and boundary portals. Wilderness ranger or personnel presence, moderate.
	Campsites would be located and/or set back from lakes, streams, trails, meadows, and other camps, so standards for water, soil, and fisheries are met and Wilderness conditions are not degraded.		
	Discourage or prohibit the use of feeds that have not been certified as weed-free. Follow current laws or regulations if more restrictive.		
	Follow designated areas of operation for outfitters during big-game hunts except for cougar, bear, and sheep.		
	Wilderness Ranger visits to all areas would occur at least annually.	Wilderness Ranger visits to all areas would occur at least every 2 weeks.	Wilderness Ranger visits to all areas would occur at least weekly.
	Risk and challenge paramount.	Risk and challenges very important.	Risk and challenge important.
Visitor Impacts Oregon & Idaho	Negligible impact. No site hardening.	Unnoticeable impacts. No site hardening.	Subtle impacts. Little or no hardening.
	Vegetation loss would not exceed 225 sq. ft. (15 x 15 area). No loss of trees and fewer than 2 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss.	Vegetation loss would not exceed 400 sq. ft. (20 x 20 area). No loss of trees and fewer than 4 trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss.	Vegetation loss would not exceed 625 sq. ft. (25 x 25 area). No loss of trees and fewer than 6 trees per site show signs of damage by visitors. 75% of sites may show less than indicated vegetation loss.
	Maintain air quality consistent with Class I Airshed.		
	Naturalize most campfire sites.	Campsites would be separated from other camps and set back from trails, meadows, lakes and streams where necessary and indicated by monitoring.	
	Campsites would be located on forest litter, on durable soil substrate, and within forested areas and other more durable vegetation types.		
	Grazing is permitted except in camp areas. Stock would be held away from lakes, streams, trails, and camp areas.		
	Regulate stock to maintain natural ecosystems, particularly water and riparian vegetation, and to not disrupt the experience of others.		
	Limit impacts of recreation livestock to the CMP utilization standard.		

Table C-2c: Setting Indicators – Hells Canyon Wilderness, continued

Indicators	Pristine	Primitive	Semi-primitive
Visitor Impacts Idaho Only	Manage campfire impacts so that natural processes are not affected except at campsites. No loss of trees for campfire fuel; maintain natural conditions.		
	Dead standing trees left in place except at administration sites. Any falling of trees around such sites is accomplished only by Forest Service personnel. No loss of trees would occur due to other human activity.		
			Primitive toilets may be provided in extreme cases, but must be located away from water or watercourses.
Facilities	No facilities. Self-reliance.		Primitive horse-confinement facilities may be provided to confine impacts in heavily used areas on a case-by-case basis.
Water	No degradation of water quality.	Maintain natural quality of streams and lakes. There will be no measurable degradation of water quality because of human activity except for temporary, transitory changes caused by pass-through activities.	
Vegetation	Maintain healthy, native vegetation with no long-term (greater than 1 year) modification of plant succession on areas outside of campsites and trails.		
	Manage snags and down vegetation to approximate natural conditions		
		Utilize dead and down vegetation in amounts that can be replaced annually through natural accumulation.	
	Protect endangered, threatened, and sensitive species from human impacts. Maintain viable populations of plant species so that they will not move toward federal list.		
Air	Air quality affected by outside sources is maintained to meet Federal and State standards and is not degraded by recreation use inside the Wilderness.		
Soils	Downed and standing dead, woody material will be left in place in amounts necessary to provide for sustainable natural soil conditions and wildlife habitat.		
	Collecting and burning of wood in campfires may occur only if natural levels of dead down and standing wood, and soil organic levels are sustainable and for wildlife habitat		
	Displacement and erosion of soil resulting from human activity will be limited to a rate that closely approximates the natural process.		
	Soil compaction would not exceed limits that will prevent natural plant establishment and growth.	Soil compaction would not exceed limits that will prevent natural plant establishment and growth, except at some campsites, administrative facilities, and within standard trail width.	
Aquatic	No fish stocking.	Manage fish stocking in accordance with Forest Service/Oregon Department of Fish and Wildlife/Idaho Fish and Game process agreement on Fisheries Management in Wilderness.	
	Maintain natural aquatic habitat and water quality.		
	Manage to allow natural ecological succession to operate freely insofar as it does not endanger significant resources outside Wilderness.		
	Maintain fish indigenous to the Wilderness, with emphasis on protection of endangered, threatened, sensitive and proposed species (FSM 2600).		
	Maintain the natural quality of streams and lakes. There will be no measurable degradation of water quality because of human activity, except for temporary, transitory changes caused by pass-through activities.		
	Protect riparian areas and habitat from visitor and livestock use alterations.		
Wildlife	Visitor use would not decrease habitat effectiveness for any species.		
	Downed and standing dead, woody material will be left in place in amounts necessary to provide for wildlife habitat and sustain natural soil conditions. Manage habitat to allow natural ecological succession to operate freely, so that the forces of natural selection and survival, rather than human activities, determine which and what numbers of wildlife species exist.		
	Protect wildlife indigenous to the Wilderness from human-caused impacts that could lead to listing as threatened or endangered.		
	Provide protection for threatened, endangered, and sensitive species (FSM 2600) from human-caused impacts. Protect Federally listed species where necessary for their perpetuation and to aid in their recovery.		
	Visitor use will seldom and only temporarily displace wildlife species. Visitor use would not displace wildlife from critical areas during critical periods. Protect riparian areas from visitor- and livestock-use alterations.		
	Seek Regional Forester approval for predator control programs within Wilderness on a case-by-case basis where control is necessary to protect Federally listed, threatened, or endangered species in order to protect public health and safety or to prevent serious loss of domestic livestock.		

Note: Indicators would provide baseline data for measuring impacts.

Setting Indicators for Nonwilderness

Table C-2d defines standards for the setting indicators to meet social objectives in the nonwilderness portion of the HCNRA. These standards would apply under **Alternatives B** and **E-modified.**

Table C-2d: Setting Indicators - Nonwilderness

Indicators	SPNM (semi-primitive nonmotorized)	SPM (semi-primitive motorized)	RN (roaded natural)	R (rural)
Access	Cross-country travel. No motorized trails.	Motorized primitive, Traffic Service Level D or motorized trails. Maintenance Level 2. Surface maintenance and treatment may vary from low to high based on desired ROS experience.	Motorized, controlled. Traffic Service Level B, C, or D. Maintenance Level 2, 3, or 4. Surface maintenance and treatment may vary from low to moderate or high, based on desired ROS experience.	Full access. Traffic Service Level A and B. Maintenance Level 4 or 5. Surface maintenance and treatment is high based on desired ROS experience.
Remoteness	Distant sight and/or sound of human activity. More than ½-hour walk from any motorized travel.	Distant sight and/or sound of human activity. More than ½-hour walk from any better-than-primitive roads.	Remoteness of little relevance.	Remoteness of little relevance.
Naturalness/ Visual Quality	High to very high scenic integrity.	Moderately high to very high scenic integrity.	Moderately high to very high scenic integrity.	Moderately high to very high scenic integrity.
Social Encounters	6-15 parties meet per day. 80% probability that 6 or fewer campsites are visible during the use season.	6-15 parties meet per day outside road corridors. 80% probability that 6 or fewer campsites are visible during the use season. In road corridors, ranging between low to moderate (5-10) encounters and moderate to high (10-15) encounters.	Sound encounters are part of the experience. Developed sites and trails moderate to low. In road corridors, ranging between low to moderate (15-60) encounters and moderate to high (60-150) encounters.	Sound encounters are part of the experience. Developed sites are from moderate to high. In road corridors, ranging between low to moderate (150-300) encounters and moderate to high (300-500) encounters.
Visitor Management	Subtle on-site regimentation and control. Limited information facilities. Risk and challenge are important.	Subtle on-site regimentation and control. Limited information facilities. Risk and challenge are important.	On-site regimentation and controls are noticeable but harmonize with the natural environment. Simple information facilities. Risk and challenge not very important.	On-site regimentation and controls are obvious and numerous but harmonize with the natural environment. Information is available at sites that are more complex. Risk and challenge not important.
Visitor Impacts	Impacts are not noticeable. No site hardening. Vegetation loss would not exceed 625 sq. ft. (25 x 25 ft. area). Six trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss.	Impacts are not noticeable. Limited site hardening. Vegetation loss would not exceed 1,000 to 1,500 sq. ft. (31 x 33 ft. or 38 ft. x 39 ft.). Eight trees with exposed roots per site. 75% of sites may show less than indicated vegetation loss.	Impacts are not noticeable. Subtle site hardening. Vegetation loss would not exceed 1,500 to 2,500 sq. ft. 38 x 39 ft. or 50 ft. x 50 ft.). Ten trees with exposed roots per site. 70% of sites may show less than indicated vegetation loss.	Impacts may be noticeable. Site hardening is obvious. Vegetation loss would not exceed 3,000 sq. ft. (54 x 55 ft. area). Twelve trees with exposed roots per site. 70% of sites may show less than indicated vegetation loss.
Facilities	No facilities for user comfort. Rustic and rudimentary facilities. For site protection, use native or native-appearing materials only.	No facilities for user comfort. Rustic and rudimentary facilities. For site protection, use native or native-appearing materials only.	Rustic facilities provide some comfort for the user as well as site protection. Use native-appearing materials for facilities with low maintenance requirements. Materials are more refined.	Some facilities designed primarily for user comfort and convenience. Some synthetic but harmonious materials for facilities may be incorporated. Design may be more complex and refined.

Note: FSM 2300 recommends that no synthetic materials be evident. These indicators allow use of native or native-appearing materials to facilitate long-term, low cost maintenance. Refer to the ROS Users Guide (USDA 1982).

Road Management Definitions

Table C-2e displays the definition of road management objectives and corresponding maintenance and traffic-service levels for (National Forest System) roads to meet the Access setting indicator for each RAA.

There are 735 miles of NFS open roads under the jurisdiction of the Forest Service. There are approximately 120 miles of private and 30 miles of county and state roads, for a total of 885 miles of roads. Private, state, and county roads comprise 17 percent of the total open roads under all jurisdictions.

Of the NFS roads in the HCNRA, approximately 71 percent, or 533 miles, are either continuously open or intermittently open to the public due to assigned road-maintenance and/or traffic-service levels. Road maintenance is the ongoing upkeep of a road necessary to retain or restore the road to the approved road management objective. Maintenance levels define the levels of service provided and maintenance required for specific roads. Traffic-service levels describe the significant characteristics and operating conditions of a road. Maintenance levels and traffic-service levels must be consistent with road management objectives for the area. Road-management objectives in the HCNRA define the levels of service provided by a NFS road consistent with the surrounding ROS class. Refer to the **Glossary** for further definitions related to roads.

Table C-2e: Road Management Objectives, Maintenance Levels, and Traffic Service Levels

Semi-primitive nonmotorized (SPNM)			
Semi-primitive nonmotorized roads provide hiking or equestrian passage on closed or decommissioned roads.			
SPNM	**Maintenance Level 1**	**Maintenance Activities**	**Traffic Service Level-None**
Most areas do not have developed roads.	Assigned to intermittent service roads during the times they are closed to vehicular traffic. Closure periods must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to acceptable levels and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate." Roads may be of any type, class, or construction standard and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at Level 1, they are closed to vehicular traffic, subject to prohibitions and restrictions, and may be available and suitable for nonmotorized users.	Road condition surveys, evaluation, and monitoring of maintenance needs. Activities include limited equipment operation, opening closed roads, manual cleaning of drainage structures, and vegetation management that stabilizes or reduces erosion. Repairs are scheduled and completed within funding limitations when critical resource damage is reported. Roadway activities, including blading, clearing logs, and noncritical repairs that can be delayed are accomplished when the road is placed in active status.	All motorized traffic is prohibited.
Semi-primitive motorized (SPM)			
Generally used for four-wheel drive, logging, or ranching activities. Passenger-car use is discouraged by entrance conditions or signage. Users can expect SPM roads where there are no attractions such as viewpoints or trailheads.			
Low-level SPM	**Maintenance Level 2**	**Maintenance Activities**	**Traffic Service Level D**
Native surface roads suitable for high-clearance vehicles but not passenger cars or vehicles towing trailers. Users may need to back vehicles for long distances when meeting oncoming traffic. Maintenance activities usually occur every 5 years or when resource needs are identified. Roads are allowed to "brush in" and users are responsible for	Assigned to roads open for use by high-clearance vehicles. Providing access for passenger cars is not a consideration. Traffic is normally minor, usually consisting of administrative, permitted, dispersed recreation, and/or other specialized uses. Log haul may occur. Appropriate traffic management strategies are either to discourage or prohibit passenger cars or to	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Many roads in this category have grass in the	Flow is slow and may be blocked by an activity. Two-way traffic is difficult and may require backing up. Road surface is rough and irregular. Travel with low-clearance vehicles is difficult. Not designed for mixed traffic.

removing trees blocking the road. Ruts and potholes are accepted if they do not contribute to sediment loading.	accept or discourage high-clearance vehicles.	travel way. User comfort is not a consideration.	
High-level SPM	**Maintenance Level 2**	**Maintenance Activities**	**Traffic Service Level C**
Corresponds to a single-lane native-surface road or road surfaced with spot rock, strip rock, or pit-run material suitable for high-clearance vehicles. The road may have infrequent turnouts. Pit-run material is applied to the road surface, but is not grid rolled, leaving a rough, rocky surface that drains well and discourages passenger car use. User maintenance is the same as for the low-end SPM. This standard meets resource and safety needs and is the minimum standard for accessing attractions such as viewpoints or trailheads. Maintaining current road alignment, road-surface type, and corridor width are emphasized.	Assigned to roads open for use by high-clearance vehicles. Providing access for passenger cars is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic-management strategies are to “discourage” or “prohibit” passenger cars or to “accept” or “discourage” high-clearance vehicles.	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Many roads in this category have grass in the travel way. User comfort is not a consideration.	Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited.
Roaded Natural (RN)			
Provide safe access for passenger cars. Maintenance activities generally occur annually or every two years, depending on funding and need. FS clears these roads of brush and logs. Surface maintenance increases at higher levels. Because of increased speeds, turnouts are needed more frequently. Open local roads and some collector roads within RN are managed for high-clearance vehicles. In such cases, road-maintenance standards defined for SPM would be used.			
Low-level RN	**Maintenance Level 3**	**Maintenance Activities**	**Traffic Service Level C**
Corresponds to a road-surface type of either native or base course. Pit-run material is processed to provide a rough but suitable service for passenger cars. Dust increases during dry conditions, and the road provides good resource protection when wet.	Assigned to open roads maintained for travel by prudent drivers in standard passenger cars. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low-speed, single-lane, with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are "encourage" or "accept." "Discourage" or "prohibit" strategies may be applied for certain classes of vehicles or users.	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.	Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited.
Medium-level RN	**Maintenance Level 3**	**Maintenance Activities**	**Traffic Service Level C**
Corresponds to a road-surface type of crushed aggregate, maintained for passenger cars. Usually maintained annually, surfaces may "washboard" and become dusty with increased use.	Assigned to open roads that are maintained for travel by prudent drivers in standard passenger cars. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low-speed, single-lane, with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or "accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.	Flow interrupted by limited passing facilities. Some vehicles will have difficulty negotiating certain segments. Design speeds are generally low. May not be stable under all traffic or weather conditions. Use and traffic volumes are limited. **Traffic Service Level B** Congested during heavy traffic, with slower speeds and periodic dust. Provides service to traffic with any legal-size load or vehicle.

High-level RN	Maintenance Level 4	Maintenance Activities	Traffic Service Level B
Corresponds to a road-surface type of an aggregate that has been dust abated or treated with soil or silicone stabilizers or asphalt emulsions. A dust-free, smooth surface for passenger cars is the desired product. This standard is often applied to provide double-lane access to attractions such as viewpoints or campgrounds.	Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double-lane and aggregate-surfaced. However, some roads may be single-lane. Some roads may be paved and/or dust-abated. The most appropriate traffic-management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads.	Congested during heavy traffic, with slower speeds and periodic dust. Provides service to traffic with any legal-size load or vehicle. **Traffic Service Level A** Free-flowing, mixed traffic with stable and smooth road surface. Safely provides service to all traffic at 25-35 mph.
Rural (R)			
Rural roads provide the highest standard of road. These arterial roads provide the main access to the HCNRA but generally lack the speeds and alignment provided by state highways.			
Rural	**Maintenance Level 5**	**Maintenance Activities**	**Traffic Service Level A**
Double-lane with a road-surface treatment and generally 24 feet wide. Has center striping and often stripes marking the shoulders.	Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double-lane and paved. Some may be aggregate-surfaced and dust-abated. The appropriate traffic management strategy is "encourage."	Roadside brushing, hazard-tree removal, surface blading, drainage maintenance, structure maintenance, clearing logs, slide and slip cleanup and repair, sign maintenance, and surface replacement. Drainage function and soil stabilization are of prime importance. Dust abatement and more frequent blading may be needed on segments of multi-purpose roads. All Level 5 roads have permanent (paved) surfaces.	Free-flowing, mixed traffic with stable and smooth road surface. Provides service to all traffic with safety at 25–35 mph.

Facilities Management Definitions

Development and maintenance levels of each site would vary by alternative. In some cases, facilities at sites would need to be improved; reconstructed or new sites would be constructed in the future to meet the goals and objectives of the alternatives. Refer to the following tables for the definitions of the various levels of development, maintenance, and capital improvement.

Table C-2f displays the definition of each development level. Development levels specify the amount and scale of modification allowed at a site to meet the Facilities setting indicator for each RAA.

Table C-2f: Facilities Development Levels

Development Level 1
Minimal site modification is evident. Improvements mostly for protection of the site, but rustic or rudimentary improvements may be provided for the comfort of the users. Avoid use of synthetic materials. Minimum controls are subtle. No obvious regimentation, spacing is informal and extended to minimize contacts with others. Motorized access may or may not be provided or permitted.
Development Level 2
Little site modification is evident. Improvement mostly for protection of the site, but rustic or rudimentary improvements may be provided for the comfort of the users. Avoid use of synthetic materials. Minimal controls are subtle. Little or no obvious regimentation. Spacing is informal and extended to minimize contacts with others. Motorized access provided or permitted over primitive roads.
Development Level 3
Site modification is moderate. Facilities about equally developed for protection of site and comfort of users. Rustic design may use native or synthetic materials that approximate the look of native materials. Inconspicuous vehicular controls are usually provided. Roads may be hard surfaced and trails are clearly visible. Development density may approximate 3 family units per acre. Primary access to a site may be on a higher standard, more traveled road. Visitor information services, if available, are informal and incidental.
Development Level 4
Site is heavily modified. Some facilities designed strictly for comfort and convenience of users, but luxury facilities are not provided. Facility designs are rustic but tend to incorporate more synthetic materials. Controls for vehicle traffic are present and usually obvious. Primary access is provided over more highly developed roads. Development density may be greater than 3 family units per acre. Visitor information services are frequently available.

Development Level 5
High degree of site modification is evident. Facilities, mostly designed for comfort and convenience of users, include flush toilets, may include showers, bathhouses, laundry facilities, and electrical hook–ups. Synthetic materials are commonly used. Formal walkways on surfaced trails may be provided. Regimentation of users is obvious. Access is usually by higher speed roads. Development densities are eight or more family units per acre. Formal visitor information services are usually available. Architecture may be more contemporary and mowed lawns and landscaping is not unusual. This type of site is only provided in special situations or close to large cities where other lands for recreation are not available.

Table C-2g displays the definition of each maintenance level. Maintenance levels specify the work performed annually to prevent breakdowns in facilities or to maintain servicability of assets. Maintenance levels describe the type of type of work allowed at a site to meet the Facilities setting indicator for each RAA.

Table C-2g: Facilities Maintenance Levels

Maintenance Level 1
Abate major health or safety hazards. Applies to all administrative facilities no longer needed. Occupancy is not allowed. Facilities waiting retirement. Do not use or abandon.
Maintenance Level 2
Maintain until retirement. All types of facilities, particularly sheds, and storage buildings. Infrequent human use. Facilities needed next 3-5 years. Maintain only to extend life until retirement. Normal health and safety inspections required. Identified health and safety hazards must be abated.
Maintenance Level 3
Keep operational. Types of facilities include minor offices (nonpublic) ships, warehouses, seasonal quarters, and nonpublic areas. (Offices and workspaces that are occupied frequently or continuously due to need but should be replaced. Other support structures have infrequent or no human use.) All systems and components are kept operational. Repair critical-service interruptions within 24 hours and non-critical within 2 weeks. Appearance is neat, pleasing, and of good quality. Maintain to extend life 10-15 years or until retirement. Normal safety inspections; abate all hazards.
Maintenance Level 4
Repair critical-service interruptions. Types of facilities include major, actively used facilities with high employee use and less than 50 visitors per day, and operations centers, crew quarters, and employee quarters. Service is the same as Level 3, except critical service is repaired within 24 hours, non-critical within 5 days. Maintain to extend life to 20+ years. Normal safety inspections; abate all hazards.
Maintenance Level 5
Highest-quality/like-new. Types of facilities include major offices and suburban offices, visitor centers, and major laboratories; similar to Level 4, except greater than 50 visitors/day. Highest quality materials and workmanship are used. Continual maintenance by custodial staffing. Normal safety inspections; abate all hazards.

In some cases, maintenance has been deferred and not performed when it should have been or has been delayed to a future period. These facilities may need to be rehabilitated, replaced, or decommissioned due to deferring maintenance to meet the RAA setting indicator for Facilities. Other facilities may require some type of capital improvement such as an expansion or an upgrade to meet the RAA setting. Proposals for deferred maintenance activities or capital improvements would likely occur in the future to meet the goals and objectives of the alternatives. **Table C-2h** describes the extent of actions allowed at an existing site or a new site to meet the Facilities setting indicator for each RAA. Refer to the **Glossary** for further definitions related to facilities.

Table C-2h: Deferred Maintenance Activities and Capital Improvements

Rehabilitation
Renovation or restoration of an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Because there is no significant expansion or change of purpose for the fixed asset, the work primarily addresses deferred maintenance.
Custodial
Replacement of nonfunctional site elements or facilities with in–kind materials or structures. Location, design, and configuration remain constant. Accessibility standards, where possible, are compatible with designated ROS settings.
Replacement (Level A)
Total or scheduled replacement of all existing facilities with new facilities. Location and configuration remain constant; design and construction materials are simple, durable, and cost efficient. The overall goal is to maintain a rustic appearance while reducing the operation and maintenance costs of the facility. Some adjustment may be made in unit size and parking accommodations. Accessibility standards would be compatible with the designated ROS settings.
Replacement (Level B)
The same as Replacement (Level A) with the following exception: Design configuration and location may change slightly to accommodate ecological or environmental concerns. Increased capacity could result even though the general location and area of the campground is the same.
Decommission
Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems nor require maintenance.

Alteration
Capital improvement to change the function of an existing fixed asset. The capacity or size of the fixed asset is not significantly changed. Deferred maintenance of the original fixed asset may be reduced or eliminated by an alteration.
Expansion
Capital improvement to increase the capacity or size of an existing fixed asset to serve needs different from or significantly greater than those originally intended.
Upgrade
Total redesign and construction of a camping facility. Location may change considerably depending on ecological, environmental, or social concerns. The overall goal would be to maintain a rustic appearance but promote designs and materials that would result in lower operation and maintenance costs. Some campground classifications may change to the next higher level but none would exceed a Development Level 4 for this planning period. Accessibility standards would be appropriate to the designated ROS. A change in design standards has the potential to move the ROS to a higher development setting although that is not the intent of upgrading a facility.
New Construction
The erection, construction, installation, or assembly of a new fixed asset. The design and construction of the new facility would meet the designated ROS settings, ecological, environmental concerns, and accessibility standards. Design standards have the potential to move the ROS to the next higher development setting although it is not the intent of the new facility to effect such a change.

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